

**Statement of Spencer Abraham  
Secretary, U.S. Department of Energy  
Committee on Armed Services  
United States Senate**

**March 20, 2003**

**Introduction**

Good morning Mr. Chairman and Members of the Committee. It is a pleasure to be here today to discuss the President's Fiscal Year 2004 budget request for the Department of Energy (DOE). In doing so, I want to stress the ways this budget is going to help us accomplish our various missions related to defense and the environment.

The President's FY 2004 Budget of \$23.4 billion for the Department of Energy (DOE) continues the Administration's commitment to ensure national defense and safeguard the Nation's energy security through advances in science and technology, as well as fulfill our obligation as environmental stewards to surrounding communities. While DOE's national policy objectives have not changed, this budget reflects a new approach toward conducting business at the Department of Energy. Reengineering efforts that we began in FY 2002 have taken shape: programmatic activities are better focused to achieve primary mission objectives; budget priorities are set with improved measurable performance criteria; and corporate management initiatives reflect aggressive implementation of the President's Management Agenda.

Of the total FY 2004 budget request of \$23.4 billion, approximately 71 percent of the total Department of Energy budget, or \$16.6 billion, is for the Department's Defense programs within the jurisdiction of this Committee. Within the \$16.6 billion budget, \$8.8 billion is to support activities in the National Nuclear Security Administration, \$6.8 billion to fund the environmental cleanup activities, \$430 million to fund the Defense Nuclear Waste Fund, and \$522.7 million to fund Other Defense Activities.

This budget request reflects and addresses the critical challenges we face today and will continue to face in the coming decades. I have charted a course for the Department that emphasizes DOE's critical contributions to our Nation's national security and provides forward-reaching solutions to America's energy problems. These priorities as they relate to this Committee's jurisdiction are to:

- meet our responsibilities to maintain the nuclear stockpile;
- expand and make more comprehensive our non-proliferation activities;
- accelerate the environmental cleanup program; and
- build and maintain a stable and effective national defense program to respond to the guidance in the Nuclear Posture Review with special emphasis on revitalizing laboratory and production plant infrastructure.

The FY 2004 Budget is focused to deliver on these priorities.

As part of the Department's Strategic Planning process these priorities translate into six overlapping departmental goals that form our core mission of National Security. All of the Department's planning and budgeting for FY 2004 drives toward these six goals:

- maintain a safe, secure and reliable nuclear deterrent;
- control nuclear proliferation;
- reduce dependence on energy imports;
- achieve a cleaner, healthier environment;
- improve our energy infrastructure to ensure the reliable delivery of energy; and
- maintain a world class scientific research capability.

Formulation of this year's budget reflects significant management changes occurring within the Department. Guided by the President's Management Agenda and the management reforms I started in FY 2001, and incorporated more fully into the budgeting process in 2002, this budget implements integrated, long-term program planning and performance accountability. The Department is implementing a five-year programmatic and planning framework to provide an unprecedented opportunity to consider future impacts in determining current year funding priorities. This budget was formulated to deliver measurable results to reach the Department's strategic goals. This achievement is a significant step toward reaching our key goal to focus DOE activities to adhere to the primary mission of national security. By streamlining program activities and management structures, the Department of Energy will more effectively and efficiently manage and produce the results expected by American taxpayers.

### **President's Management Agenda**

Rising to the challenge of the President's Management Agenda, the Department is beginning to improve how it manages, budgets, and plans for all programs, projects and activities. By improving management, performance, and accountability, the Department is striving for a level of performance that keeps DOE programs safe, on track, and on budget. A system of scorecards is being used to evaluate the effectiveness of various programs and allocate resources to achieve this end. Performance measures are improving to ensure that they are specific, quantifiable, concise, comprehensive, and relevant to the American taxpayer. Also, in accordance with the President's commitment to an expanded and effective electronic government, DOE is centrally managing information technology investments and other capital assets to reduce waste, increase productivity and provide increased services at lower cost.

**Research and Development Investment Criteria.** The President's Management Agenda calls for consistent and sufficient evaluation of future research and development (R&D) investments and past performance. In response, the Department developed internal guidance for programs to score their R&D activities against the Administration's applied R&D investment criteria. This approach focuses R&D dollars on long-term, potentially high-payoff activities that require Federal involvement to be both successful and achieve public benefit. The Department will continue to work to develop consistent scoring and benefits estimation methods, to permit comparison of applied R&D programs

across the Department. The applied R&D scorecard process is an important way the Department is integrating performance into the budget. The scorecard process is in its second year of development. The goal is to develop high analytical justifications for applied research portfolios in future budgets. This will require the development and application of a uniform cost and benefit evaluation methodology across programs to allow meaningful program comparisons.

**Program Assessment Rating Tool.** In addition to the use of R&D investment criteria, the Department implemented a new tool to evaluate the management effectiveness of selected programs. The Program Assessment Rating Tool (PART) was developed by the Office of Management and Budget (OMB) to provide a standardized way to assess the effectiveness of the Federal government's portfolio of programs. While OMB's objective for FY 2004 was to evaluate 20% of each government agency, the Department of Energy reviewed nearly 60% of its activities through the PART process. The Departmental elements that participated were: Environmental Management; Science; Fossil Energy; Nuclear Energy; Energy Efficiency and Renewable Energy; the Power Marketing Administrations; and the National Nuclear Security Administration.

The structured framework of the PART provides a means through which programs can assess their activities differently than through traditional reviews. While some of the programs received less than favorable scores, the information exchange between the Department and OMB proved quite valuable. The current focus is to establish outcome- and output-oriented goals, the successful completion of which will lead to benefits to the public, such as increased national security and energy security, and improved environmental conditions. The Department will incorporate feedback from OMB into the FY 2005 budget and planning process, and will take the necessary steps to continue to improve performance. The results of the reviews are reflected in the Department's FY 2004 Budget.

### **National Nuclear Security Administration**

The Department of Energy, through the National Nuclear Security Administration, preserves U.S. national security by ensuring the safety, security, and reliability of our Nation's nuclear deterrent, working to reduce the global danger from the proliferation of nuclear materials and other weapons of mass destruction, and providing technical expertise in advancing Homeland Security. The FY 2004 budget request for NNSA is \$8.8 billion, a \$925 million increase above the FY 2003 budget request, and includes:

- Weapons Activities (\$6.4 billion)
- Defense Nuclear Nonproliferation (\$1.3 billion)
- Naval Reactors (\$768 million)
- Office of the NNSA Administrator (\$348 million)

The Administration's Nuclear Posture Review (NPR) set the current national nuclear weapons policy reflected in the Department's FY 2004 budget request for the National Nuclear Security Administration (NNSA). The NPR calls for the NNSA to maintain the

viability of the Nation's nuclear weapons capability without the use of underground testing; develop a stockpile surveillance and engineering base; refurbish and extend the lives of selected warheads; and maintain a science and technology base, including responsive facilities and infrastructure, needed to ensure the safety and reliability of the Nation's nuclear weapon stockpile.

The Department's NNSA has recently implemented a major reorganization that follows the principles of the President's Management Agenda, to improve government through performance and results. The new organizational structure eliminates a layer of management, consolidates offices and administrative functions, and sets NNSA on a course to achieve an almost 20 percent reduction in federal personnel by the end of FY 2004.

**Weapons Activities:** One of my most important responsibility as Secretary of Energy is to certify to the President the safety and reliability of our nuclear stockpile. Our nuclear weapons capability protected the nation and helped us to win the 50-year Cold War. Today it continues to be a key strategic component of our Nation's security posture. Our challenge today is large and complex: we must maintain the safety; security; reliability; and effectiveness of our aging nuclear weapons stockpile without resort to underground testing. We must also provide a manufacturing base for the production of a replacement weapon if the need should arise.

Our FY 2004 Budget proposes \$6.4 billion for the Weapons Activities program, which also includes funding for safeguards and security for NNSA sites and for rebuilding our national security infrastructure. For the last seven years, the Stockpile Stewardship program has allowed the Secretaries of Energy and Defense to certify to the President that (1) the Nation's nuclear weapons stockpile is safe, secure and reliable and (2) that there is no need to resume underground testing.

To ensure that the existing stockpile continues to meet its military requirements, the NNSA also has a comprehensive refurbishment program known as stockpile life extension. It is presently working on 4 warhead types in the enduring stockpile - - the W87, W76, B61, and the W80. This program designs, builds, tests and installs new subsystems and components thereby extending the operational service life for these warheads for some 30 years.

NNSA is also restoring the full suite of manufacturing capabilities needed to respond to any stockpile contingency.

NNSA is installing an interim pit production capability at Los Alamos. Later this year Los Alamos will deliver a W88 pit that will meet all quality manufacturing requirements for use in the stockpile. This will be the first pit made by the United States since the shutdown of Rocky Flats in 1989. NNSA has begun work on design and siting for a modern pit facility that will be capable of manufacturing all pit types for the current stockpile and any new requirements, should they arise. To complete the materials supply story, NNSA will begin producing new tritium for the stockpile by irradiation of tritium producing rods in a TVA reactor this fall.

We are also investing in the leading edge scientific and engineering tools required to support the stockpile now and into the future. Three areas deserve special mention. First, with the advanced scientific computing initiative (ASCI), NNSA is working with U.S. computer manufacturers to acquire the world's fastest and most capable computers to address nuclear weapons performance issues that several years ago were impossible to solve. Second, the Dual Axis Radiographic Hydrotest Facility at Los Alamos is providing Acat-scan-like images of weapons implosion processes. This test bed provides critical data to validate the ASCI codes. Third, later this year, the world's most powerful laser, the National Ignition Facility, will begin to carry out experiments at the Lawrence Livermore national laboratory in support of the nuclear weapons stockpile.

As the Nuclear Posture Review highlighted, the threats we face today are dramatically different from those we faced a few years ago. To ensure that future American presidents have deterrence options to deal with these threats, we have a modest Advanced Concepts program (\$21m) underway. \$15 million will be allocated to the Robust Nuclear Earth Penetrator (RNEP). This program will examine whether or not two existing warheads in the stockpile B the B61 and the B83 B can be sufficiently hardened through case modifications and other work to allow the weapons to survive penetration into various geologies, with high reliability, before detonating. The remaining funds will be divided between the weapons laboratories for studies of other advanced concepts work.

DOE supports about \$1 billion annually for ongoing operation of NNSA facilities at the government-owned, contractor operated, national laboratories, production plants, and test site. In addition, \$273 million is requested in FY 2004 for eight new construction starts and 12 ongoing construction projects. The Facilities and Infrastructure Recapitalization Program (\$265 million) is responsive to the Nuclear Posture Review infrastructure guidance, and is in its third year to restore, rebuild and revitalize the physical infrastructure of the nuclear weapons complex that has deteriorated and is in immediate need of attention. This program is tightly structured to address highest priority needs, to eliminate deferred maintenance requirements, and eliminate excess space in all nuclear weapons complex facilities. Our responsibilities also encompass security for the nuclear weapons complex. In the past year, we have placed the highest priority on addressing urgent, emergent concerns about the safeguards and security posture of our nationwide complex of facilities and transportation systems following the events of September 11, 2001. In addition to increasing our protective forces, enhancing training, and upgrading equipment, we will begin a modest R&D effort to try to improve the effectiveness of technologies for physical and cyber security. We also upgraded our emergency response assets, which are available to be deployed in emergencies around the world.

**Defense Nuclear Nonproliferation:** America's safety must be our paramount concern. Presidents Bush and Putin have agreed to an unprecedented level of bilateral cooperation to control the proliferation of nuclear materials. The President's FY 2004 budget request of \$1.3 billion for Defense Nuclear Nonproliferation reflects the Administration's full commitment to reducing the global nuclear danger and participating in the Global Partnership to sustain nuclear nonproliferation initiatives in the former Soviet Union. This request supports Departmental programs to (1) enhance U.S. capability to detect nuclear weapons proliferation, (2) prevent and reverse proliferation of weapons of mass

destruction (WMD), (3) protect or eliminate weapons and weapons-usable nuclear material and/or infrastructure, and redirect excess foreign weapons expertise to civilian enterprises, and (4) reduce the risk of accidents in nuclear fuel cycle facilities worldwide.

The FY 2004 funding level for Defense Nuclear Nonproliferation reflects a 30% increase over the FY 2003 request of \$1 billion. The increase provides for the start of construction of a mixed oxide (MOX) fuel fabrication facility in the U.S. and U.S. efforts to assist Russia with the start of construction of an industrial scale MOX fuel fabrication facility. In addition to MOX construction activities, the request of \$657 million for Fissile Material Disposition supports completion of design activities for the pit disassembly and conversion facility and continuation of the U.S. “off-spec” HEU blend-down project.

Additionally, the request includes \$30 million to implement a new program to accelerate nuclear materials disposition efforts in support of the 2002 G8 Summit initiatives to purchase Russian highly enriched uranium (HEU) above the amounts in the 1993 U.S./Russia HEU Purchase Agreement. The United States is currently in the process of drafting agreements with Russia for the purchase of highly enriched uranium from Russia to supply selected U.S. research and test reactors and for the purchase of downblended Russian HEU for a low-enriched uranium (LEU) stockpile in Russia.

The FY 2004 request also provides \$40 million for the Russian Transition Initiative (RTI) to reduce the migration risk of nuclear and WMD expertise in the former Soviet Union. The RTI partners former Soviet weapons scientists with U.S. industry partners on projects selected for their commercial potential, while also assisting the Russians in downsizing their nuclear weapons complex and opening the closed nuclear cities to commercial ventures. RTI has garnered over \$125 million in matching resources from U.S. industry partners, which amounts to \$3 in private sector funds for every \$2 in U.S. Government funding. In addition, private investment funding has contributed over \$90 million to further augment its technology commercialization efforts.

The FY 2004 request also includes \$50 million to assist the Russian Federation to cease its production of weapons-grade plutonium by providing replacement power production capacity. In FY 2003, responsibility for the program was transferred from the Department of Defense to the Department of Energy. Agreements were recently signed with the Russian Federation, allowing work to be initialized on this program.

The request includes \$204 million to support the research, development, testing, and evaluation of nuclear proliferation detection technologies for agencies responsible for monitoring proliferation and combating terrorism.

A request of \$226 million for the International Nuclear Materials Protection and Cooperation program (MPC&A) will continue to improve the security of weapons-usable nuclear material and weapons in Russia, and secure materials that could be used in radiological dispersion devices (dirty bombs). Specifically, the Department is working to secure approximately 600 metric tons of fissile materials and thousands of warheads. The program provides for security of trucks and railcars transporting nuclear weapons-usable

materials and consolidates nuclear material at fewer locations in order to reduce vulnerability from theft and sabotage. In FY 2004, cooperation will expand to include Russian strategic rocket forces.

Additionally, the MPC&A request supports efforts to install radiation detection equipment at borders of Russia and the former Soviet Union in order to prevent nuclear smuggling and illicit trafficking.

The Nonproliferation and International Security request of \$102 million supports U.S. efforts to control exports of items and technology that aid in the development of WMD, implement international safeguards in conjunction with the International Atomic Energy Agency, and explore and implement innovative approaches to improve regional security.

In addition, the FY 2004 request includes an increase for development and delivery of tools to meet requirements to detect, understand, and verify dismantlement of clandestine nuclear programs.

**Naval Reactors:** The Naval Reactors program is responsible for the safe operation of reactor plants in operating nuclear-powered submarines and aircraft carriers constituting 40 percent of the Navy's combatants. It also fulfills the Navy's requirements for new nuclear propulsion plants that meet current and future national defense requirements. The program is beginning development and will deploy, later this decade, a new design reactor core to meet the demands of longer, harder ship deployments. The FY 2004 Budget Request totals \$768 million, an increase of \$612 million over the FY 2003 appropriations, and allows Naval Reactors to fund this transitional technology.

### **Achieve A Cleaner, Healthier Environment**

Protecting the environment is compatible with increasing the supply of dependable, domestically produced energy. As President Bush has said, "Sustained economic growth is the solution, not the problem, because a nation that grows its economy is a nation that can afford investments and new technologies." By harnessing the power of American science and technology, we can achieve both energy independence and a cleaner, healthier environment. The FY 2004 Budget embodies a commitment to current and future generations of Americans to accelerate risk reduction and cleanup of environmental damage resulting from Cold War nuclear programs, reduce the polluting effects of energy sources, and develop secure energy technology options for the future.

**Environmental Management:** The total FY 2004 budget request for Environmental Management (EM) activities totals \$7.2 billion, approximately 5 percent above the comparable FY 2003 request, to accelerate risk reduction and closure. This is the highest amount ever requested for the EM program. Within this Committee's oversight, the Department is requesting \$6.8 billion for the EM program, of which \$5.8 billion is for Defense Site Acceleration Completion and \$995 million is for Defense Environmental Services.

The Environmental Management program was created in 1989 to safely manage the cleanup of the environmental legacy from 50 years of nuclear weapons production and nuclear energy research at 114 sites around the country. The scope of the program includes stabilization and disposition of some of the most hazardous materials known. In February 2002, the EM program released a Top-To-Bottom Review, which revealed that process rather than cleanup results had been the basis for performance and cleanup approaches.

Following this review, the EM program committed to devote the next eighteen months to developing and implementing several key management reforms that would drive accelerated risk reduction and project completion. We are ahead of schedule. In one year, we have begun developing and implementing four management reforms, which serve as the basis for the EM program's accelerated risk reduction cleanup initiatives. These reforms are:

Acquisition Strategy— We are implementing a strategy that will both increase competition by enlarging the pool of potential contractors competing for our work and increasing the accountability of our contractors to deliver real, meaningful cleanup.

Configuration Control— EM has begun implementing a strict configuration management system that baselines a number of key, critical program elements, such as Performance Management Plans, EM corporate performance measures, and life-cycle costs. Strict configuration control and monitoring of these key elements will facilitate a high confidence level that the goals and direction of the accelerated cleanup initiatives are being met.

Human Capital— This reform strongly supports the President's Management Agenda. EM is building a more robust organizational and performance accountability system that holds each manager and employee accountable for actions and results. Individual performance management is being fully integrated into EM organizational goals. We have completed two phases of senior executive reassignments between both the Field and Headquarters.

New Budget Structure— We have developed and begun implementing a new budget structure, which complements other management reform initiatives by focusing on completion and endpoints, and communicating EM's goals and objectives. The new budget structure clearly identifies scope and resources that directly support the accelerated cleanup and risk reduction mission.

Since the release of the Top-To-Bottom Review, significant progress has been made with respect to these management reforms. In addition, EM has made efforts to identify and implement changes in ten areas emphasized in the Top-To-Bottom Review that are critical to the success of the program. EM has focused these activities into special projects, each with a complex-wide perspective. Successful execution of these projects is crucial to improving the performance of the program and eliminating many of the barriers that have hindered previous initiatives to accelerate cleanup and reduce life-cycle cost.



In FY 2004, the EM program will continue making progress in implementing management reforms and making changes in the areas emphasized in the Top-To-Bottom Review. The EM FY 2004 budget request has been tailored to meet our mission of accelerated risk reduction and completion. The most impressive aspect of this budget is that it fully reflects each site's new accelerated risk reduction and cleanup strategies. The strategic groundwork has been laid and the EM program is moving forward. Through the implementation of accelerated cleanup strategies, the EM program anticipates that cleanup will be completed no later than 2035, at least 35 years earlier than originally anticipated and life-cycle savings of greater than \$50 billion will be achieved.

FY 2004 will be a banner year, where significant risk reduction will be achieved. During FY 2004, the EM program will:

- Eliminate 1.3 million gallons of radioactive waste from underground tanks, and permanently close 9 underground radioactive waste tanks (two at Savannah River, one at INEEL, and 6 at Richland).
- Complete stabilization of all remaining plutonium metals, oxides, and residues in EM inventory (at Richland and Savannah River).
- Package 633 metric tons of spent nuclear fuel for safe storage and disposal (cumulative 88% of EM's inventory packaged).
- Accelerate transuranic waste shipments to the Waste Isolation Pilot Plant. EM will ship more than 12,000 m<sup>3</sup> of transuranic waste to the Waste Isolation Pilot Plant.
- Complete remediation of 180 formerly contaminated sites (surpassing 50% of these sites in the EM inventory).

The FY 2004 budget will allow the EM program to remain focused on the core mission of accelerated risk reduction and project completion.

**Legacy Management:** The FY 2004 budget realigns program activities that will better support the Department's long-term mission by creating the Office of Legacy Management to manage post cleanup activities. The Department is requesting \$47.5 million in FY 2004 for the Office of Legacy Management to monitor and maintain the integrity of cleanup remedies and administer the Department's post-closure obligations at closed sites. Legacy Management will be the steward of sites cleaned up and closed by DOE and the Army Corps of Engineers, administer activities for post-retirement benefits for former contractor employees and manage long-term contractor liabilities. This restructuring supports the Department's efforts to focus the Environmental Management program, which used to carry these responsibilities, to achieve more cleanup and risk reduction for the American taxpayer. I cannot stress strongly enough that even with the completed remediation and closure of EM sites, the Department will never abandon its responsibilities to the communities. Establishing an Office of Legacy Management will ensure that those concerns and responsibilities are represented by a dedicated office, measured only by their success in meeting the defined needs of those communities and their constituents.

**Civilian Radioactive Waste Management:** The President's February 2002 recommendation and Congress' July 2002 approval of Yucca Mountain, Nevada as the

Nation's high level nuclear waste repository was a seminal step in advancing the Department's goal to ensure the safe and secure disposition of dangerous nuclear materials away from the hands of terrorists. The budget requests \$591 million for the Department's repository program. This request coupled with the FY 2003 requested amount would support the completion of work needed for the submission of a license application to the Nuclear Regulatory Commission in 2004 and the development of transportation capabilities needed to initiate repository operations by 2010. However, the \$131 million reduction from the President's FY 2003 budget request together with the four month-long continuing resolution, has introduced a high risk in our ability to meet a December 2004 license application date, but we are making every effort to meet this objective.

## **Homeland Security**

**Safeguards and Security:** Safeguarding and securing DOE's nuclear facilities, materials and information, and protection of our employees remains one of the Administration's top priorities. As such, the Department's total safeguards and security funding in the FY 2004 request is \$1.2 billion, an increase of \$179 million over the FY 2003 request. Within the amount requested, \$586 million will support activities to safeguard DOE's NNSA nuclear weapon facilities, \$357 million will support activities that protect the Cold War nuclear waste material being cleaned up at our environmental cleanup sites, \$238 million will fund the security of the Department complex-wide, and \$48.1 million will support the continued safeguards and security activities at our scientific laboratories and facilities. A portion of these expenses will be recovered through charges to non-DOE customers performing work at DOE laboratories. I will continue to work closely with the President to ensure our homeland security and fulfill our obligation to protect the American people. With the Administration's strong will and commitment to national security, the funding request for safeguards and security will translate into measurable results.

**Counterintelligence:** The Department's world leadership position in nuclear weapons knowledge as well as its extraordinary research and development of many leading edge technologies makes it a priority target of foreign intelligence collection. To offset this threat, the Department is requesting \$46 million to support counterintelligence activities across the entire complex. These activities are focused on protecting our nuclear weapons secrets, but also emphasize a high priority on protecting our other sensitive scientific endeavors, and on combining with other Departmental elements in our efforts to defeat terrorism.

**Independent Oversight:** I rely upon my independent oversight organization to provide me with a current and accurate assessment of the Department, including the NNSA, in the areas of safeguards and security, cyber security, emergency management, and environment, safety and health. This office conducts comprehensive evaluations to verify that the Department's critical assets are protected, that the Department can effectively respond to any emergency, and that site workers, the public, and the

environment are protected from hazardous operations and materials. Independent oversight activities are conducted with a focus on independence and objectivity, using a systematic oversight process, with an extensive emphasis on performance and performance testing. For FY 2004, our budget proposes \$22.6 million for an independent oversight program that promotes excellence and continuous improvement for the protection of Departmental critical assets.

**Energy Assurance:** Failure to meet increasing energy demand with increased energy supplies and vulnerability to disruptions from natural or malevolent causes could threaten our Nation's economic prosperity, alter the way we live our lives, and threaten our national security.

DOE will continue to assist in meeting this homeland security challenge. To that end, the FY 2004 budget proposal maintains an analytical capability to support the Department's energy security responsibilities. Included in the budget is \$4.3 million for Energy Assurance activities to continue to conduct energy security activities in coordination with the Department of Homeland Security. This is a key concern underlying the President's NEP recommendations.

## **Conclusion**

Mr. Chairman and Members of this Committee that concludes my prepared statement. I will be glad to answer any questions you may have at this time.